

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vigniia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		DATE	FIRST NAMED INVENTOR		TTORNEY DOCKET NO.	CONFIRMATION NO.	
09/652,090	08/31/2000		Haruo Kodama	9369	9369-51US(T37-124467M/TH) 2837		
570	7590	09/30/2003					
AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200					EXAMINER LOPEZ, FRANK D		
					3745		
				DA	TE MAILED: 09/30/2003	•	
						1Q	

Please find below and/or attached an Office communication concerning this application or proceeding.

•		M					
	Application No.	Applicant(s)					
	09/652,090	KODAMA ET AL.					
Office Action Summary	Examiner	Art Unit					
	F. Daniel Lopez	3745					
Th MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was a failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on 14 A	lugust 2003 .						
2a) ☐ This action is FINAL . 2b) ☑ Thi	is action is non-final.						
3) Since this application is in condition for allowa							
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
4)⊠ Claim(s) <u>1-5 and 37-39</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-5 and 37-39</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)					

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 14, 2003has been entered.

Response to Amendment

Applicant's arguments filed August 14, 2003, have been fully considered but they are not deemed to be persuasive.

Applicant argues that "one skilled in the art having fig. 1 and the disclosure... would understand that the pressure signal supplied to the pump discharge pressure control unit is related to the pressure of the supply pressure..., the pressure at the hydraulic motor...and the predetermined pressure" (page 12 fourth paragraph). This is partially true. What one of ordinary skill would not understand is how the pressure signal is related to the supply pressure, motor pressure and predetermined pressure.

The signal (36) sent to the pump discharge pressure control unit (46, fig 1 or 140, fig 11) generates a corresponding signal pressure. The discharge pressure of the pump is equal to the signal pressure (plus a pressure corresponding to the spring, for fig 1), because the pressure relief valve is a differential relief valve, with the force due to the pump pressure acting on one side, against the signal pressure (and spring for fig 1) on the other side. If the pump pressure is the motor pressure plus a constant valve for the predetermined pressure, then there is no need to measure the pump pressure. If applicant intends for the predetermined pressure to vary based on the pump pressure, there is no criteria for this relationship and/or why this relationship exits. One of ordinary skill would not know how to calculate the pressure signal based on the pump and motor pressures, because there no indication as to how it is done. And therefore the disclosure is not enabling.

Application/Control Number: 09/652,090

Art Unit: 3745

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 1-5 and 37-39 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention and/or in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 line 45-54 claims "oil pressure control means for receiving the supplyingoil pressure signal output...and the drive oil pressure signal...and outputting a pressure signal...thereby controlling the pressure of the working oil supplied from the working oil supplying means to be higher, by a predetermined pressure, than the pressure of the working oil for driving and rotating the drive rotary member". Page 52 line 5-8 states "A pressure of the working oil supplied from the hydraulic pump 42 to the directional control valve 25 is controlled to be higher than the pressure of the working oil for driving and rotating the hydraulic motor 43 by a maximum pressure of 20 kg/cm²"; and page 53 line 11- page 54 line 3 states "When the pressure control circuit 23B varies the current...to the electromagnetic relief valve 46, a set pressure of the electromagnetic relief valve 46 varies since the set pressure...is determined by the current input thereto. Since the pressure of the pilot oil in the pilot oil passage 67 is equal to the set pressure in the electromagnetic relief valve 46, the pressure of the pilot oil also varies with variation of the set pressure of the electromagnetic relief valve 46. The set pressure of the main relief valve 45 is determined by the pressure of the pilot oil...Further, the main relief valve controls the pressure of the working oil that is supplied from the hydraulic pump 42...to be the set pressure or lower."

Application/Control Number: 09/652,090

Art Unit: 3745

Clearly, the above claim and discussion indicate that the pressure difference between the pressure supplied by the pump and the pressure of the working oil is a maximum of 20 kg/cm². Since the main relief valve 45 is moved to an open position by the pressure supplied by the pump and moved toward a closed position by pressure in pilot line 67 and by the spring; to achieve this pressure difference, the pressure in the pilot line plus a pressure corresponding to the spring must be equal to the working pressure plus the 20 kg/cm². Since the pressure in the pilot line 67 is only a function of the working pressure, the current sent to the electromagnetic relief valve 46 is only a function of the working pressure, and therefore it is unclear why the supply pressure is sent to the control unit 23B, and how the supply pressure is used to generate the current for the electromagnetic relief valve 46.

If the supply pressure is not used to determine the current for the electromagnetic relief valve 46, as appears evident from the above discussion, then the disclosure is confusing, for indicating that the supply pressure is used to determine the current. Otherwise, if the supply pressure is used to determine the current for the electromagnetic relief valve 46, the specification is not enabling to one of ordinary skill in this art, since the relationship between the working and supply pressures and the current is not specified.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5 and 37-39 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. As discussed above, it is clear how to determine the signal sent to the electromagnetic valve, based on the working pressure. There is no indication as to how to use the pump pressure to determine the signal sent to the electromagnetic valve. Since all of the claims include the limitation "an oil pressure control unit for receiving the supply-oil pressure signal output...and the drive

Application/Control Number: 09/652,090 Page 5

Art Unit: 3745

oil pressure signal output...and outputting a pressure signal", since the oil pressure control unit only generates the pressure signal output, since one of ordinary skill in this art would not know, and the disclosure does not indicate, how to use the supply-oil pressure signal output to generate the pressure signal, this disclosure is inoperative.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.

F. Daniel Lopez Primary Examiner Art Unit 3745

September 27, 2003